

**Notice of Allowability**

Application No.

10/718,357

Applicant(s)

LEVY, ISRAEL

Examiner

Art Unit

Andrea M. Valenti

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 29 November 2005.
2. ☒ The allowed claim(s) is/are 4-7, 13, 14, 16, 17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|   | 9. <input type="checkbox"/> Other _____  |

A.W.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rashida A. Karmali on 24 January 2006.

The application has been amended as follows:

**Claim 1 was cancelled**

**Claim 2 was cancelled**

**Claim 4, line 1**, "The system according to claim 1 wherein" was changed to --The method according to claim 7, wherein--

**Claim 5, line 1**, "The system according to claim 1, wherein" was changed to --The method according to claim 7, wherein--

**Claim 6, line 1**, "The system according to claim 5, wherein" was changed to --The method according to claim 5, wherein--

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**Claim 7, was deleted and replaced with** --A method of cultivating seaweeds in land based seawater ponds, said method comprising the steps of :

- producing spores and sporelings sexually and asexually in cultures maintained in a phycological laboratory facility,
- growing the sporelings in suspension cultures under optimal growth conditions in a plurality of sleeves aerated and containing seawater enriched with nutrients 0.5mM  $\text{NH}_4\text{Cl}$  and 0.05 mM  $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$  bi-weekly,
- transferring sporelings in the range of 0.5-1cm long to small growth tanks that are nutrient enriched bi-weekly,
- transferring the matured sporelings to a plurality of large cultivation tanks that are nutrient enriched to allow for rapid growth yields of about 1 kg/m<sup>2</sup>/week,
- cutting the seaweed and transferring to inoculation ponds,
- cutting the seaweed and transferring to cultivation ponds,
- harvesting full grown seaweed pieces that reach 10 cm in length or 2.5-4 kg/m<sup>2</sup> density,
- drying and grinding the harvested seaweed, and preparing the resulting product for use.--

**Claim 8 was cancelled**

**Claim 9 was cancelled**

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**Claim 10 was cancelled**

**Claim 13, line 1**, "The technology according to claim 2, wherein" was changed to --The method according to claim 7, wherein--

**Claim 14, line 1 and 2**, "The technology according to claim 2, wherein the drying unit" was changed to --The method according to claim 7, wherein the drying step--

**Claim 16, line 1**, "The system according to claim 1 wherein the " was changed to --The method according to claim 7, wherein a--

**Claim 17, line 1**, "The system according to claim 5 wherein the " was changed to --The method according to claim 5, wherein a--

**Claim 18 was cancelled**

**Claim 19 was cancelled**

**Claim 20 was cancelled**

***Allowable Subject Matter***

Claims 4-7, 13, 14, 16, and 17 are allowed.

The following is an examiner's statement of reasons for allowance:

Cited references *Techniques of Laboratory Cultivation of Marine Algae*, University of South Florida, St. Petersburg Dept. of Marine Science, Nov 1983, page 6-9; U.S. Patent No. 6,156,561; *Techniques of Laboratory Cultivation of Marine Algae*. University of South Florida, St. Petersburg Dept. of Marine Science, Nov 1983, page 42, 6, 7, and 40; U.S. Patent No. 5,358,858; U.S. Patent No. 5,958,761; NoriTech-seaweed Biotechnologies Ltd. <http://www.naiot.com/html/life/noritech.htm> posted 03 December 2000 [retrieved from internet 29 June 2004] 3 pages; U.S. Patent No. 6,698,134; U.S. Patent No. 3,195,271; U.S. Patent No. 5,350,588; U.S. Patent No. 4,235,043; U.S. Patent No. 3,879,890; U.S. Patent No. 6,199,317; U.S. Patent No. 6,056,476; U.S. Patent No. 6,579,714; Japanese Patent JP 04210535 A; Japanese Patent JP 06217657 A; Japanese Patent JP 2002238384; Japanese Patent JP 11113434A teach it is known to produce seaweed spores in laboratories/Petri dishes, to cultivate seaweed in a series of different size tanks and ponds that are enriched with fertilizers N:P; and to harvest the seaweed. The prior art of record all fails to show, and fails to make obvious, either alone and/or in combination a method of cultivating seaweeds in land based seawater ponds, comprising the steps of : -producing spores and sporelings sexually and asexually in cultures maintained in a phycological laboratory facility,

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- growing the sporelings in suspension cultures under optimal growth conditions in a plurality of sleeves aerated and containing seawater enriched with nutrients 0.5mM NH<sub>4</sub>Cl and 0.05 mM NaH<sub>2</sub>PO<sub>4</sub> ·H<sub>2</sub>O bi-weekly,**
- transferring sporelings in the range of **0.5-1cm** long to small growth tanks that are nutrient enriched bi-weekly,
- transferring the matured sporelings to a plurality of large cultivation tanks that are nutrient enriched to allow for rapid **growth yields of about 1 kg/m<sup>2</sup>/week,**
- cutting the seaweed and transferring to inoculation ponds,
- cutting the seaweed and transferring to cultivation ponds,
- harvesting full grown seaweed pieces that reach **10 cm in length or 2.5-4 kg/m<sup>2</sup> density,**
- drying and grinding the harvested seaweed, and preparing the resulting product for use.--

It is the collective outline of the above steps that place the application in condition for allowance and the bolded limitations identify where the focus of the patentable weight is placed.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 571-272-6895. The examiner can normally be reached on 7:00am-5:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Andrea M. Valenti  
Patent Examiner  
Art Unit 3643

23 January 2006